AMORY ENGINEERS, P.C.

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September 22, 2020

Rockland Zoning Board of Appeals Town Offices 242 Union Street Rockland, MA 02370

Subject: Shinglemill - Chapter 40B Comprehensive Permit

Dear Zoning Board of Appeals:

This is to advise that we have reviewed the following documents related to the proposed Shinglemill Chapter 40B development off Pond Street:

- Shinglemill LLC ZBA Submission Package REV 2, dated September 4, 2020, prepared by David Andronico
- Shingle Mill Multi-Family Development site plans (34 sheets), revised September 4, 2020, prepared by Tighe & Bond (T&B)
- Traffic Study Peer Review, prepared by Gillon Associates, dated July 17, 2020
- Preliminary Architectural Peer Review, prepared by Davis Square Architects, dated September 2, 2020
- Correspondence:
 - Letter from Joseph LaPointe, Superintendent, Abington & Rockland Joint Water Works, dated July 30, 2020
 - Letter from Lt. Zeoli, Rockland Police Department, dated August 13, 2020
 - o Letter from Deputy Heaney, Rockland Fire Department, dated August 31, 2020
 - Letter from Ms. Virginia Hoffman, dated September 15, 2020

The documents have been revised to address comments contained in our August 14, 2020 letter to the Board along with comments from the Board and other Town departments. To streamline this report, comments that have been previously addressed have been omitted. The following comments have either not been addressed, are new comments or are informational.

Comments

General and roadway:

- 1. The cut and fill analysis included in the submitted documents indicates that the total fill will be about 64,600 cubic yards which equates to almost 2,600 truckloads of material.
- 2. In our August 14th letter we asked for the top and bottom elevations of the retaining walls to be listed on the plans. These are shown on Sheet C103.1 but not Sheet C103.2.



- 3. As noted in our previous letters there is a proposed 18-inch drain line between the "L" building and a proposed retaining wall north of the building. In the September 4th response the Applicant states that the wall has been moved to be eleven feet off the building. However, the wall scales at eight feet off the building and it is proposed to be a segmental type wall which requires horizontal geosynthetic reinforcement behind the wall as shown on the detail. Future maintenance of the drain line would likely require disturbing the geosynthetic reinforcement which could compromise the stability of the wall. An alternate wall design that does not require reinforcement behind the wall should be considered in this area.
- 4. As noted in our previous letters and discussed in the September 15, 2020 public hearing some of the proposed retaining walls are shown to be right along the wetland lines and care will need to be taken during construction to prevent disturbance to the wetlands.
- 5. We recommend that the Cape Cod berm along the access road be installed integrally with the binder and wearing courses of pavement.
- 6. As noted in our previous letters and discussed in the public hearings there is no pedestrian access proposed along the proposed roadway between Pond Street and the proposed buildings. The Applicant has stated that they are not proposing pedestrian access because there are no pedestrian facilities along Pond Street. We note that in his comments transmitted to the Board via email on April 3, 2020, Mr. David Taylor, Highway Superintendent, requested sidewalks be constructed by the developer along Pond Street from Turner Road to Hingham Street. We believe that pedestrian access to Pond Street is desirable.
- 7. Since the Rockland Wetland Protection Bylaw (Chapter 407), defines the 100-foot buffer to wetlands as a resource area, in our August 14th letter we requested that the Applicant's engineer provide the total area of disturbance and the total proposed impervious area within the 100-foot buffer to wetlands. Notes added to Sheet C-102 indicate that there will be approximately 203,600 square feet of disturbance within the 100-foot buffer to wetlands and about 60,700 square feet of that would be impervious surfaces. Chapter 407 also regulates a twenty-five (25) foot no touch buffer to wetlands. Because the proposal includes work within the 25-foot no touch buffer (and in some areas right up to the wetland) the Applicant should also provide the Board with the total area of disturbance and the total proposed impervious area within the 25-foot buffer. We note that the Applicant has requested a waiver from the Rockland Wetland Protection Bylaw to allow for disturbance within the 25 foot no touch buffer. In addition to providing the areas of disturbance requested above, we suggest that the Applicant provide the total areas of upland, wetland, 25-foot buffer and 100-foot buffer on the total project site. This would allow the Board to understand/quantify the total percent of buffer and resource area disturbance on the parcel(s).
- 8. In our August 14th letter we noted that some of the proposed improvements along Pond Street are not within the Pond Street right-of-way and are on private property which does not belong to the Applicant. It the response, the Applicant states that an easement has been negotiated with the abutter and that any additional provisions will be coordinated. If not provided to the Board before the close of the public hearing we recommend that the

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Board require copies of all easements and agreements as a condition of approval if the Board approves the project.

9. As discussed in the September 15th public hearing, Gillon Associates provided a peer review of the Traffic Impact Study (dated July 27, 2020). The Applicant's traffic engineer should respond to the Gillon peer review.

Utilities:

- 1. Documentation should be provided to demonstrate that there will be adequate water supply for domestic use and fire flow.
- 2. Documentation of adequate capacity in the existing municipal sewer system should be provided.

Stormwater and erosion control:

- 1. Note 2 on the Gravel Wetland detail on Sheet C-505 states "Infiltration testing of the native soils at the subgrade of the proposed gravel wetland shall occur prior to the installation of the gravel wetland and shall be coordinated with the engineer. If the native soils exceed a permeability rate of 0.03 ft/day the soils should (be) amended or liner added as determined by the engineer. The infiltration testing shall be witnessed by the Board's consultant engineer and the soil amendment or liner shall be subject to approval by the Board's consultant engineer." Should the Board approve the project we recommend this be a condition of approval.
- 2. The Applicant has requested a waiver to allow the use of high density polyethylene (HDPE) pipe for the drainage system. If HDPE pipe is allowed we recommend that flared end sections be reinforced concrete for durability.

Fire Department

- 1. In our previous letters we have requested documentation to verify that the subsurface infiltration system is capable of supporting the Fire Department's heaviest apparatus. In the September 4th response, the Applicant states that "manufacturer information regarding H20 loading has been included in the detail on Sheet C-506." The Applicant should verify with the Fire Department that H20 design loading is sufficient for the Fire Department's equipment.
- 2. In its August 31, 2020 letter, the Fire Department requested additional detail for the swept path analysis to demonstrate that the Department's largest apparatus may freely maneuver within the proposed roadway and around the site.
- 3. Previous versions of the plans showed emergency fire access behind the two residential buildings and this access has been eliminated on the revised plans. The Applicant should provide documentation from the Fire Department that the current site layout, without access behind the buildings, is acceptable.

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Should you have any question, please give us a call.

Very truly yours,

AMORY ENGINEERS, P.C.

By:

Patrick G. Brennan, P.E.

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